Model No.

MONARCH WATER

Installer & User Guide

Effective January 2014

For Monarch Scaleout

'Suppliers to H.M. the Queens Estate at Sandringham'

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HINTS AND TIPS ABOUT YOUR NEW SCALEOUT

1. The Scaleout exchanges calcium ions into calcium crystals. Crystals will adhere themselves to the Post Filters internal cartridge, which is to be changed annually (or before in very hard water areas). However some will pass through as this is part of the descaling process. These will materialise as a residue/dust if the water is allowed to evaporate. For best results it is recommended to wipe away with a damp cloth before they appear.

2. Helping your kettle last longer: Your kettle will continue to have an amount of scale, but the level can be kept to a minimum by running the tap for 5-10 seconds prior to filling. Additionally, it is recommended to empty the kettle of any water left over from the previous use. When emptying, you may notice scale flakes and possibly 'milky' water too. This is normal and proof that the Scaleout is working at optimum performance. Flakes are caused by taking the water to boiling point and will not happen elsewhere throughout your system.

3. Toilets, Showers, Shower cubicle/screen, Taps etc: Because there is no direct flow across these surfaces, other than water splashing, the old scale may need to be removed with a scale remover. Any new accumulation will deposit as a soft scale and can be removed. For best results, wipe away water before being allowed to evaporate.

4. Existing scale – Scaleout water will immediately begin to de-scale your pipes and appliances. Your hot water cylinder will take longer to de-scale than your pipe work; in some cases 12-18 months; therefore you may notice different levels of Scaleout water for some time whilst the system is de-scaling. This is particularly noticeable in your bath and shower.

5. Dishwashers – On most installations the dishwasher is to be connected to the Scaleout water. We recommend that you continue to add a small amount of salt to the appliance as before, as this helps the salt holder in the appliance stay clean. We do not however recommend that crystal glass; solid silver or silver plated items are washed in your dishwasher as etching may occur. Less dishwasher liquid may be required and in certain cases this will also apply to rinse aid. For best results use a natural soap detergent/cleaning agent.
   On dishwashers connected to untreated water, you should continue to put salt into the dishwashers own softener. It will help if your dishwasher could be de-scaled prior to the installation of the Scaleout. This would also apply to your shower cubicle too.
   For best results use a phosphate free dish washing detergent.

6. Scaleout water will become available throughout your system in varying time spans. Conventional systems (tanks in your roof) will take anything from 4-10 days, whilst mains fed Pressurised Systems will give treated water within 2-3 days.

7. Scaleout water will have no adverse effect in your heating system. In every case a corrosion inhibitor such as Sentinel X100 must be used.

8. Bath and shower surfaces will become smoother – be careful, in particular the young and infirm – why not buy a bath mat?

9. If possible look to use a pure soap powder as this will help give optimum results.

10. Outside Tap – It is recommended to leave your outside tap on mains water. Additionally, in the wintertime we recommend that this tap is isolated via an internal valve to prevent freezing.

MONARCH SCALEOUT INSTALLATION INSTRUCTIONS

Thank you for choosing our SCALEOUT. Please read the following carefully, which if followed correctly, should ensure the installation is trouble free.
Before you install the unit, please ensure you have the correct model with regard to demand placed upon unit and also the water hardness. Ensure + models are used on all water hardness over 450ppm. Monarch has a nationwide database on all water hardness's for your assistance

A. PLANNING THE INSTALLATION

- Always observe the water byelaws.
- Ensure there is only one rising main.
- Make sure you have allowed space for access to the unit for any possible maintenance in the future.
- Check the water pressure and locate the rising main. Be aware of condensation occurring in warm environments. If condensation occurs, we recommend the unit is sited in a small tray that allows the water to evaporate.
- Unit must be kept upright.

B. SITING THE SCALEOUT – Fig 1

- Where possible, this should be close to the rising main.
- 'T' off for an untreated mains supply for the outside tap.
- Ensure that the unit is not subject to below 4 or above 50C.
- If siting the unit within a kitchen cupboard, loft etc. Ensure that the base/ floor is adequately supported.
- If the unit is being installed in your loft, 1st, 2nd floor etc., it is recommended to house the unit within a plastic tank and insulate well.
- The overflow on the plastic tank should be a minimum of ¾" in size. Failure to install the unit in a suitable tank will void the Guarantee.

C. NON-RETURN VALVE

In domestic applications i.e. house, bungalow, apartment, flat etc, a single check valve should be fitted. All other applications require a double check valve.

D. DRINKING WATER FACILITY

The unit produces drinking water, so unlike a salt based softener, no dedicated tap is required.

E. MATERIAL CHECK LIST

- The unit includes an installation kit as relevant to the model ordered.
- For 28mm supplies a full upgrade for the unit is available - details on request.

F. WATER PRESSURE TEST

- It is IMPORTANT that a pressure check is carried out.
- Low and high pressure can result in either damage to, or failure of the unit.
- If daytime static water pressure* exceeds 3.5 bar (50psi) a 5 bar pressure limiter should be fitted. *50psi daytime pressure can reach nearly 100psi at night!
- Minimum dynamic pressure must exceed 1.5 bar.
- If in any doubt please call us on **01986 784 759**

OPTION 1 WITH POST FILTER CONNECTED REMOTE TO SCALEOUT

G. INSTALL BYPASS VALVES & NON-RETURN VALVE

Form an installation as per Fig 1 Below.

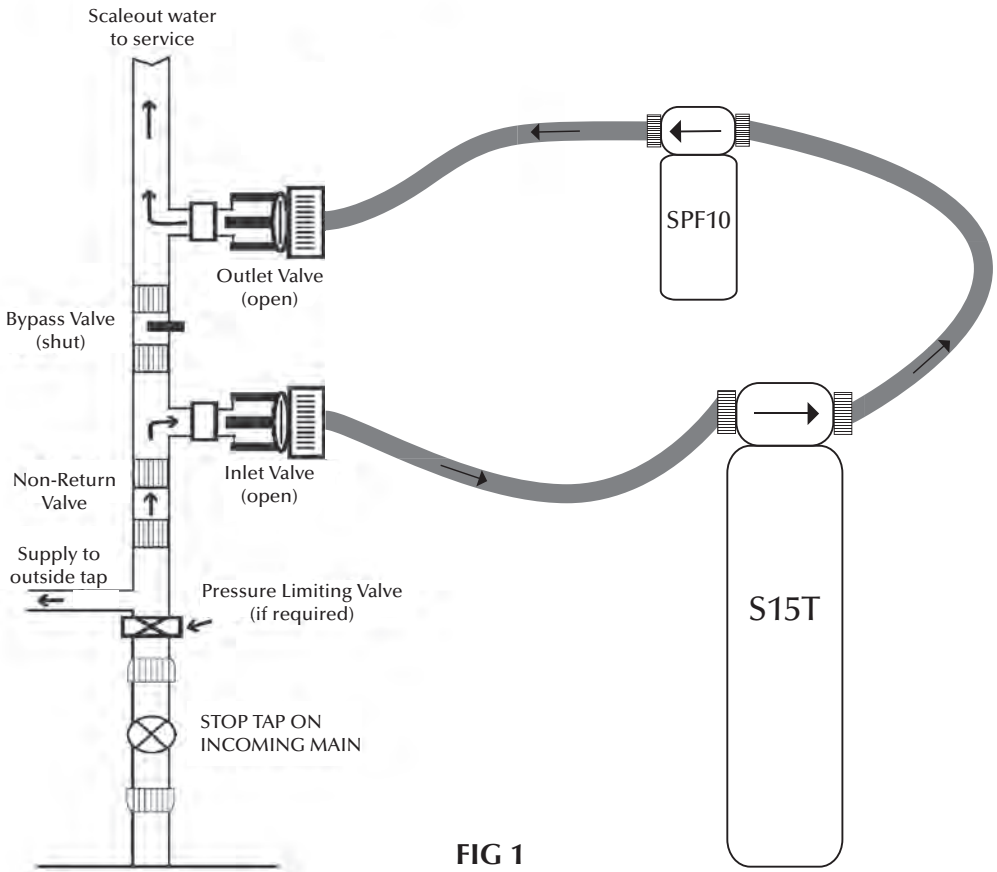


FIG 1

Checklist

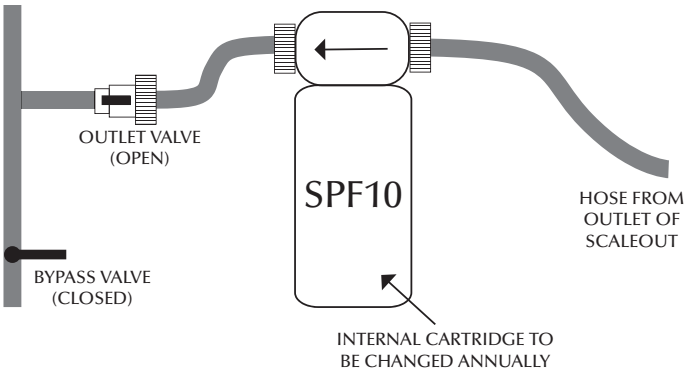
- ✔ **Water pressure 1.5 – 5 bar (20 – 70psi)**
- ✔ **Access for maintenance**

H. POST FILTER – See Fig 2

Using the short chrome braided hose provided; connect this to the OUTLET valve/male iron adaptor on the pipework and the OUTLET connection of the Post Filter. Fix SPF10 Post Filter to wall using bracket provided.

If this short hose is not appropriate, an additional longer braided hose is included within the installation kit.

FIG 2



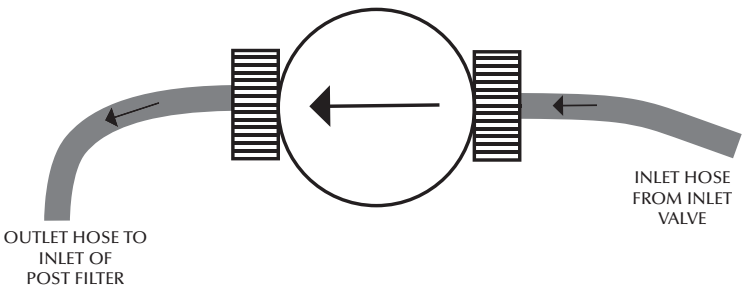
I. INLET & OUTLET CONNECTIONS – See Fig 3

Under no circumstances use washing machine hoses or plumb the unit in solid copper pipe.
Connect the inlet hose from the INLET valve/male iron adapter on the pipe work to the INLET of the Scaleout - see directional arrow on top of unit.
Connect the outlet hose from the Scaleout to the INLET of the Post Filter.

When all hoses are connected, final layout should resemble FIG 1.

PLAN VIEW OF SCALEOUT CONNECTION HEAD

FIG 3



OPTION 2 WITH POST FILTER CONNECTED DIRECTLY TO SCALEOUT

J. INSTALL BYPASS VALVES & NON-RETURN VALVE

Form an installation as per Fig 4 Below.

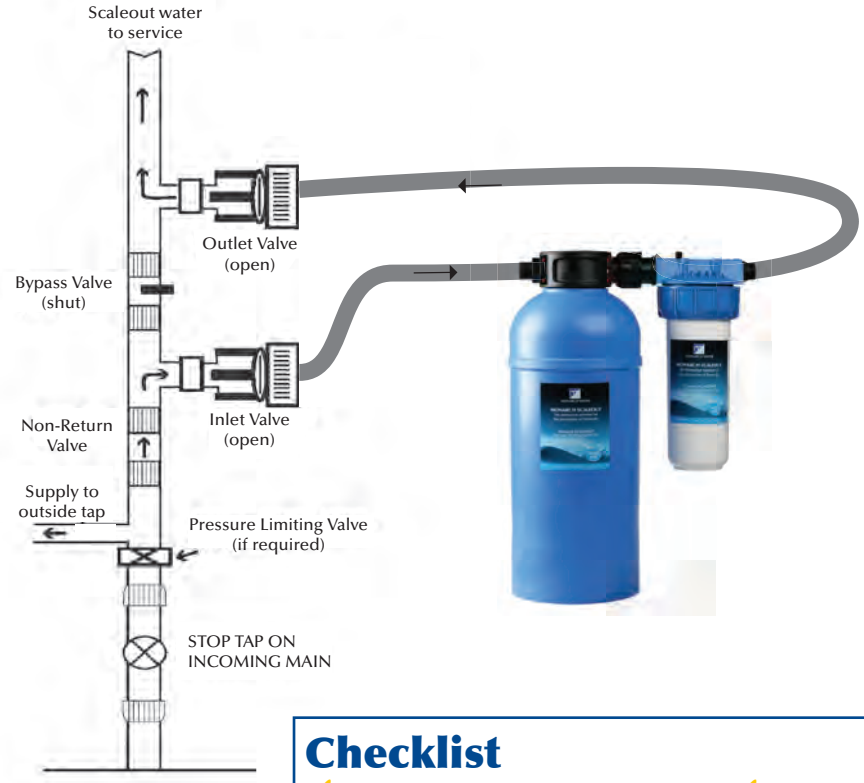


FIG 4

Checklist

✔ Water pressure 1.5 – 5 bar (20 – 70psi) ✔ Access for maintenance

K. INLET & OUTLET CONNECTIONS – See Fig 4

Under no circumstances use washing machine hoses or plumb the unit in solid copper pipe. Ensure nipples (when used) have been tightened to seal.
Connect the inlet hose from the INLET valve/male iron adapter on the pipe work to the INLET of the Scaleout - see directional arrow on top of unit.
Connect the outlet hose from the OUTLET valve/male iron adaptor on the pipe work to the OUTLET of the Post Filter.

PLEASE NOTE

1 Spare fittings and hoses are included with your unit that may not be needed

2 'O' rings have been greased at Monarch, but please check for debris that may affect the seal. For connection of the Post Filter directly to the Scaleout outlet male adaptor, remove 'o' ring from the now unused nipple and apply over the 3/4" male thread up to the shoulder on the adaptor. This will then seal in the recess of the inlet of the Post Filter. Tighten to seal.

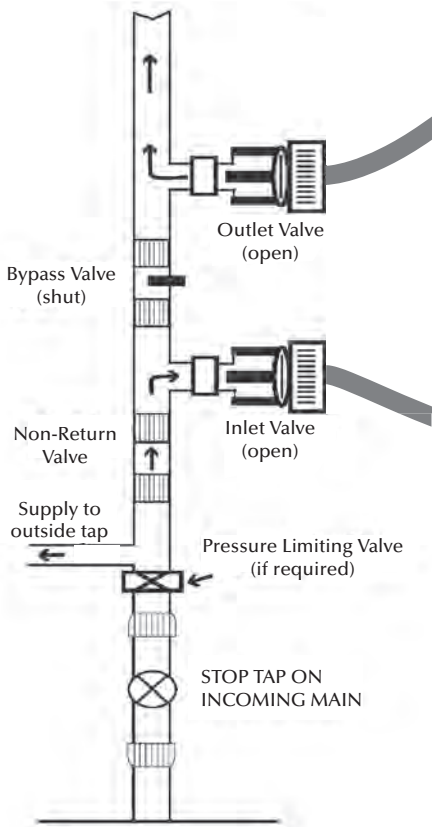
I. TEST INSTALLATION FOR LEAKS

Close Inlet and Outlet valves to the unit and open Bypass valve.
Open mains stopcock and flush the new pipe work for a minimum of 5 minutes. This can be done using any mains water tap inside the property i.e. utility room, kitchen cold tap or wash hand basin in a bathroom.
Close Bypass valve, then open Inlet and Outlet valves slowly.
Allow water to run slowly until all air is purged from the unit, then close tap.
Allow unit to rest for 15 minutes before future use. Check for leaks.

GOING ON HOLIDAY?

- Fig 5 shows the valves in the Service position (Bypass is closed and Inlet & Outlet are open).
- We highly recommend you bypass your unit when going away on holiday.
- Simply turn Inlet, Outlet and Bypass valves ¼ turn to put valves into Bypass positions.
- Upon your return, move valves back to the Service position (as Fig 5 below).

FIG 5



Installation Conditions Effective February 2013

The Monarch Scaleout is fully covered by a retrospective 3 year parts and 12 months labour guarantee for installation within the hard water regions of mainland England as detailed on Monarchs National Service Coverage Area, from date of original purchase. Installations outside this area are automatically covered by a 3 year parts only 'exchange' warranty.
Definition and example of 'Retrospective: If the resin fails at 30 months, then new resin will be replaced under the 3 year guarantee but charged at 30/36ths of the replacement resin cost, plus delivery, plus VAT.

PLEASE NOTE

This guarantee has the following conditions, and is not covered by the following.

1. Damage caused by high water pressure, we strongly recommend a 5 bar water pressure limiting valve on the inlet to your water supply, where daytime water pressure exceeds a static pressure of 3.5 bar (50psi).
2. This Scaleout is suitable for a mains water supply only.
3. Damage caused by a dirty mains water supply. The installation of a Monarch Debris Filter - cost £76.50 inc VAT & postage - on the supply to your unit cancels this clause. The majority of debris in water is caused by local authority work on the water main. If notified in advance, by your local water authority, please put your unit onto 'bypass', see Fig 5.
   For Bypass: Close both Inlet & Outlet valves, and open Bypass valve.
   For Normal Service: Open both Inlet & Outlet valves, and close the Bypass valve.
4. Call outs due to incorrect installation. If you have any queries when installing your Scaleout, please call us on 01986 784759.
5. The use of any other hoses than those provided. Under no circumstances use washing machine hoses.
6. The effect of aggressive water, the degradation and/or blinding of resin and/or chlorine attack on resin.
7. Under no circumstances plumb in the unit in solid copper.
8. The installation kit is only covered by the OEM twelve-month parts 'exchange' warranty only.
9. Compensation as a result of cancelled appointments, damage caused by, or incorrect installation of the unit. In the unlikely event of a fault, put the unit onto Bypass, see 3 above ref 'For Bypass' until an engineer calls.

THE ABOVE DOES NOT AFFECT YOUR STATUTORY RIGHTS

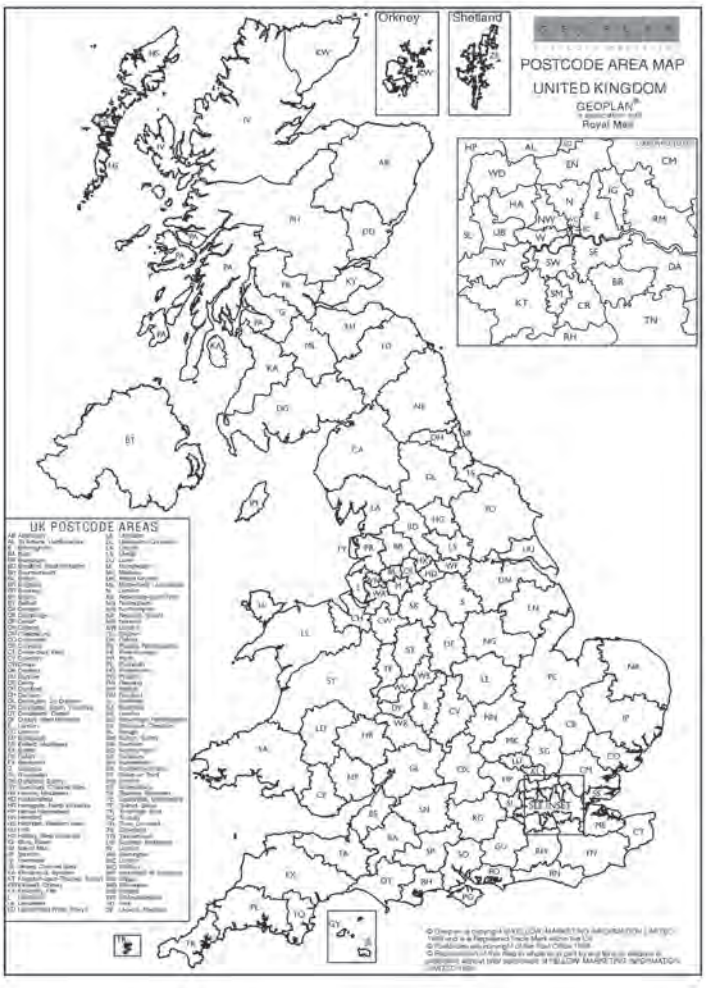
Incoming Water Conditions

Min – Max Operating pressure	1.5 – 5 bar
Temperature	4 – 50C
pH	6.5 – 8.5
Max Iron content	0.3 mg/l
Max Manganese content	0/05 mg/l
Max Copper content	1.3 mg/l
Oil & Phosphates	Free
H2S	Free

Monarch National Service Coverage Areas - Effective February 2012.

The below Postcodes (see map below) are automatically covered by a 3 year parts and 12 month labour warranty.

B	CT	LONDON inset	OX	SO
BA	CV	LU	PE	SP
BH	DT	LN	PO	SS
BN	GU	ME	RG	TN
BS	GL	MK	RH	
CB	HP	NG	SG	
CM	IP	NN	SL	
CO	LE	NR	SN	



IMPORTANT

Scaleouts sold outside the above Postcodes are to be covered strictly by a parts only 'exchange' warranty.

All parts sent back to Monarch are at the expense of the sending parties.

All repaired or replaced items will be returned to the sender on a no charge basis whilst covered by the parts exchange guarantee.

Once the parts exchange guarantee has expired, Monarch reserves the right to make a charge for any postage/delivery, labour and parts charges that is deemed necessary.

Monarch will endeavour to keep these charges at the lowest cost whenever possible.

SCALEOUT INSTALLATION RECORD

Original Installation Date	_____ / _____ / 20____
1st Resin Change Date	_____ / _____ / 20____
2nd Resin Change Date	_____ / _____ / 20____
3rd Resin Change Date	_____ / _____ / 20____
4th Resin Change Date	_____ / _____ / 20____

SPF10 INSTALLATION RECORD

Original Installation Date	_____ / _____ / 20____
1st Cartridge Change Date	_____ / _____ / 20____
2nd Cartridge Change Date	_____ / _____ / 20____
3rd Cartridge Change Date	_____ / _____ / 20____
4th Cartridge Change Date	_____ / _____ / 20____
5th Cartridge Change Date	_____ / _____ / 20____
6th Cartridge Change Date	_____ / _____ / 20____
7th Cartridge Change Date	_____ / _____ / 20____
8th Cartridge Change Date	_____ / _____ / 20____
9th Cartridge Change Date	_____ / _____ / 20____
10th Cartridge Change Date	_____ / _____ / 20____
11th Cartridge Change Date	_____ / _____ / 20____
12th Cartridge Change Date	_____ / _____ / 20____
13th Cartridge Change Date	_____ / _____ / 20____
14th Cartridge Change Date	_____ / _____ / 20____
15th Cartridge Change Date	_____ / _____ / 20____

INSTALLATION DETAILS RECORD

Installer Name .....

Installer Address.....

.....

.....

.....

.....

.....

..... Postcode .....

Guarantee Card return date: _____ / _____ / 20____

MONARCH WATER

Additional Products available from Monarch Water

Water Softeners - Domestic
Water Softeners - Light Industrial
Water Softeners - Industrial
Water Softeners - Light Commercial
Water Softeners - Food Service Equipment Protection
Calcium Filters - Food Service Equipment Protection
Water Filters - Domestic
Water Filters - Food Service Equipment Protection
Water Purifiers - Domestic
Multiflo 3 Way Taps - Domestic

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